

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered
today
and
(1) was not written for publication in a law journal
(2) is not binding precedent of the Board.

Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TOSHIO IWATA and KAZUTOSHI KANEYUKI

Appeal No. 1998-1885
Application 07/914,359

ON BRIEF

Before ABRAMS, STAAB, and MCQUADE, Administrative Patent
Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

Appeal No.1998-1885
Application No. 07/914,359

This is a decision on an appeal from the examiner's final rejection of claims 1, 2 and 9-15. Claims 16-21 have been allowed. See page 4 of the final rejection (Paper No. 18, mailed

August 20, 1996). Subsequent to the final rejection, claims 4-8, the only other claims remaining in the application, were rewritten in independent form and have now also have been allowed. See the examiner's advisory letter (Paper No. 20, mailed December 11, 1996).

Appellants' invention pertains to a power supply apparatus for an automotive heater component. By way of example, the heater component may be used to heat a window de-icer, a catalytic convertor, or the intake air for a diesel engine (main brief, page 3). Independent claim 1, a copy of which is found in an appendix to appellants' main brief, is illustrative of the appealed subject matter.

The references of record relied upon by the examiner in support of the rejections are:

Follmer	4,188,527	Feb. 12, 1980
Wareman et al. (Wareman)	4,780,618	Oct. 25, 1988
Takatsuka	5,013,994	May 07, 1991

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Harris et al. (Harris) 4,280,330 Jul. 28, 1991

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Follmer.

Claims 2, 9 and 10 stand rejected under 35 U.S.C. § 103 as being unpatentable over Follmer in view of Takatsuka.

Claims 11-15 stand rejected under 35 U.S.C. § 103 as being unpatentable over Follmer in view of Harris or Wareman and further in view of Cherry.

Reference must be made to the examiner's answer (Paper No. 24), the final rejection (Paper No. 18) and office actions mailed March 5, 1996 (Paper No. 16) and May 25, 1994 (Paper No. 9) for an explanation of these rejections.¹

The viewpoints of appellants in opposition to the positions taken by the examiner in rejecting the claims are set forth in the main and reply briefs (Paper Nos. 23 and 26).

¹ The examiner's reference on pages 3 and 4 of the answer to two separate office actions (Paper Nos. 16 and 18), which office actions in turn refer to an addition office action (Paper No. 9), for the particulars of the rejections is clearly improper (see MPEP § 1208) and creates unnecessary confusion.

Looking first to appellants' disclosure, what is termed a "typical" power supply apparatus for supplying electric power to heating elements of an automobile is illustrated in Figure 14. The apparatus of Figure 14 includes a power supply means (1, 2), a heater (3) and a switch (5), with the heater (3) being connected between the power supply means (1, 2) and the switch (5), and with the opposite side of the switch (5) being connected to ground. Appellants state (specification, paragraph spanning

pages 8-9) that a drawback of this arrangement is that if the heater is short-circuited, power is continuously supplied to the heater irrespective of the on/off condition of the switch, thus resulting in useless consumption of electric power.

An objective of appellants is to provide a power supplying apparatus that is intended to prevent wasteful power consumption even if the heater is short-circuited (specification, page 6). To this end, the elements of appellants' apparatus are arranged such that the switch (5) is connected between the power supply means (1, 2) and the heater (3), with the opposite side of the heater (3) being connected

to ground. See, for example, Figure 1. As explained by appellants on page 17 of the specification, with this arrangement, when the switch is in the off position, if the heater is accidentally short-circuited for some reason, no power is supplied from the power supply means to the heater and wasteful power consumption is prevented. In furtherance of this objective, independent claim 1 expressly calls for a *first switch connected between the power supply means and the heating means* for selectively switching on and off the power supply from said power supply means to said heating means.²

Follmer, the starting point for each of the examiner's rejections, is directed to a electric quick heater system for an automobile. Follmer's Figure 2 system, in pertinent part, includes an alternator (2) connected to a storage battery (3-1). A relay (K-1) and a heat element (R_H) are connected in parallel between the alternator and the storage battery. When the relay is open current flows through the heat element to

² Claim 11, the only other independent claim on appeal, contains similar language.

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generate heat (column 4, lines 3-12), and when the relay is closed current is shunted around the heat element to prevent it from being activated (column 4, lines 37-42). Relays (K-101) and (K-103) and heat elements (R_H) and (R_P) of Follmer's Figure 3 embodiment operate in similar fashion.

In rejecting claim 1 as being anticipated by Follmer, the examiner considers Follmer's alternator (2), relay (K-1) and resistance heat element (R_H) as corresponding to the claimed power supply, switch means, and heating means, respectively. Regarding the claimed arrangement of the switch means relative to the power supply means and the heating means, the examiner maintains that the switch of Follmer has switch contacts which completely shunt the heating element when the switch relay is activated and therefore the heater is clearly deactivated. The language of claim 1 does not specify whether or not the switch is

in series with the heater or whether the switch is in parallel with the heater, or any other orientation of the switch relative to the heater. All that claim 1 specifies is that the switch selectively switch[s] on or off the heater from the

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power supply. Clearly the heater is selectively switched off from the power supply when the switch is closed in Follmer. Likewise the heater is selectively switched on to the power supply when the switch contacts in Follmer are open. Note that one side of the switch . . . is connected at the junction between . . . the power supply 2 (alternator) and the alternator side of the heating element. In view of these remarks it is clear that . . . the subject matter of claims 1 is clearly anticipated by Follmer. [Answer, pages 6-7.]

We will not sustain this rejection.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991).

Notwithstanding the examiner's position to the contrary, claim 1 does indeed require a particular orientation of the switch relative to the power supply means and the heater. Specifically, the switch is required to be, in the words of claim 1, "connected *between* said power supply means and said heating means" (emphasis added). It is abundantly clear that the relay (switch) (K-1) of Follmer is not connected *between* the power supply means (2) and the resistance heat element (R_H) under any reasonable definition of the word "between."³ The fact that one of the terminals of relay (K-1) is connected to the power supply side of the heat element (R_H) does not suffice in this regard since under no circumstances can the terminal alone of the relay be considered a switch. For this reason, the examiner's anticipation rejection of claim 1 as being anticipated by Follmer cannot be sustained.

Concerning the standing 35 U.S.C. § 103 rejection of claims 2, 9 and 10 as being unpatentable over Follmer in view of Takatsuka, and the standing 35 U.S.C. § 103 rejection of

³ The preposition "between" may mean "[i]n the interval or position separating." *Webster's II New Riverside University Dictionary*, Riverside Publishing Company, copyright © 1984 by Houghton Mifflin Company.

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claims 11-15 as being unpatentable over Follmer in view of
Harris or

Wareman and further in view of Cherry, we have carefully
considered these secondary references additionally relied upon
by the examiner but find nothing therein that makes up for the
deficiency of Follmer noted above or that otherwise renders
any of the appealed claims obvious within the meaning of 35
U.S.C.

§ 103. Accordingly, these rejections likewise cannot be
sustained.

The decision of the examiner is reversed.

REVERSED

NEAL E. ABRAMS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LAWRENCE J. STAAB)	
Administrative Patent Judge)	APPEALS AND
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JOHN P. MCQUADE
Administrative Patent Judge

) INTERFERENCES
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